

Appl. No.: 09/806,103
Amdt. Dated:
Reply to Office Action of: October 27, 2003

REMARKS/ARGUMENTS

Applicants would like to thank the Examiner for the careful examination given to the present application. The application has been reviewed in light of the Office action, and it is respectfully submitted that the application as amended is in condition for allowance.

Claims 1-7 and 10-14 have been amended. New claims 15-18 have been added.

The abstract of the disclosure is objected to. The abstract has been amended as requested by the Examiner.

The disclosure is objected to because of informalities. The disclosure has been amended to correct the informalities as requested by the Examiner.

Claims 1-14 stand rejected under 35 U.S.C. 112, second paragraph. Claims 1, 3, 11, and 13 have been amended to more particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Claims 2, 4-7, 10, and 14 have been amended due to formal matters.

Claims 1, 2 and 6-9 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Hirayama (US Patent No. 5,493,604 A) in view of Azartash et al. (WO 9921343 A1). For the following reasons, the examiner's rejection is respectfully traversed.

None of the references disclose or suggest "a control processing section" and "an I/O section" included in an upper case as recited in claim 1. Hirayama discloses an antenna 11 and an LCD 13 provided on an upper case 3 of a portable phone. However, Hirayama is silent as to where the control processing section is located. Hirayama is also silent on whether the phone has an I/O section and where such an I/O section, if any, would be located.

Azartash does not overcome the deficiencies of the Hirayama patent. Azartash discloses an upper case and lower case, where the upper case is a thin flip cover 14 with an ear piece and perhaps a vibrator. Azartash is silent as to where the control processing section is located. Azartash is also silent on whether the phone has an I/O section and where such an I/O section, if any, would be located.

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Therefore, even if combined, the references do not disclose or suggest all the elements of the claimed invention.

Furthermore, there is no suggestion or motivation for one skilled in the art at the time the invention was made to combine Azartash with Hirayama to arrive at the claimed invention. Hirayama discloses a keypad and battery on a lower case 2 and an LCD 13 and antenna on an upper case 1. Azartash discloses a first case with a keypad below an LCD 12, and a second case that is a thin flip cover with only an ear piece and perhaps a vibrator. However, Azartash discloses that all the circuitry is located in the case that is not the flip cover. Therefore, there is no motivation to look at or use Azartash to modify the location of phone components in Hirayama. Reconsideration and withdrawal of the rejection based upon the combination of references is respectfully requested.

In regards to claim 2, none of the references disclose or suggest that "menu selecting section for selecting a menu by navigating through a menu system displayed on the display is disposed in the vicinity of a lower side of the display" as recited in claim 2. The Office Action acknowledges that Hirayama does not disclose such a menu selecting section, but cites Azartash for discloses these elements.

Azartash discloses buttons on a keypad 18, 32. However, Azartash does not disclose or suggest in the specification or figures which, if any, of the keypad buttons include a menu selecting section. Therefore, even if combined, the references do not disclose or suggest all the elements of the claimed invention.

Furthermore, there is no suggestion or motivation for one skilled in the art at the time the invention was made to combine Azartash with Hirayama to arrive at the claimed invention. Hirayama discloses ten keys 21 and function buttons 22a-22d on a keypad on a lower case 2,k and an LCD 13 on an upper case 1. Azartash discloses a keypad below a LCD 12 on a same case. Therefore, a menu selecting section, if any, in Azartash, would be located on the keypad. A combination of Azartash with Hirayama would locate a menu selecting section on the Hirayama keypad and not on a lower side of

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Hirayama display, which is located on a different case than the keypad. Thus, there is no motivation to look at or use the keypad elements in Azartash.

The desirability of such a modification to have a menu selection section in the vicinity of a lower side of the display is found only in the Applicants' own description of the invention, in contrast to the requirement that the teaching or suggestion to make the modification must be found in the prior art, and not based on an applicant's disclosure. Reconsideration and withdrawal of the rejection based upon the combination of references is respectfully requested.

Claim 3 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Hirayama, in view of Azartash, and further in view of Takagi et al. (U.S. Patent 5,235,636) and Hitachi (JP 06268724). For following reasons, the examiner's rejection is respectfully traversed.

None of the references disclose or suggest that "the flexible board shares its use as a connecting board for connecting the upper case and the lower case" as recited in claim 3. The Office action acknowledges that Hirayama and Azartash do not disclose such a flexible board, but cites Hitachi for discloses these elements.

Hitachi discloses an FPC board electrically connecting housings 1 and 2 (Abstract). It appears from Figs. 6 and 8, that the FPC board is a connection between two hard printed boards that are located in housings 1 and 2, respectively. Therefore, the Hitachi FPC board is not a flexible board used as a keyboard that shares its use a connecting board, as the Hitachi FPC board is only functioning as a connection between the two hard print boards.

Furthermore, there is no suggestion or motivation for one skilled in the art at the time the invention was made to combine Hirayama and Azartash with Takagi and Hitachi to arrive at the claimed invention. Takagi discloses a single case with a flexible printed board 8 used as a keyboard. Hitachi discloses a FPC board that is a connection between two hard printed boards. Therefore, the combination of the Takagi flexible printed board with the Hitachi FPC board would result in the Hitachi FPC board

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being a connection between a flexible printed board and a hard printed board. The desirability of such a modification to extend the flexible print board to share its use as a connecting board is found only in the Applicants' own description of the invention, in contrast to the requirement that the teaching or suggestion to make the modification must be found in the prior art, and not based on an applicant's disclosure. Reconsideration and withdrawal of the rejection based upon the combination of references is respectfully requested.

Claim 4 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Hirayama, in view of Azartash, and further in view of Ikenouchi et al. (U.S. Patent 5,835,863). For following reasons, the examiner's rejection is respectfully traversed.

None of the references disclose or suggest that "a battery terminal, a microphone, a key diaphragm, and a LED for keys are all mounted on a same surface of the flexible board and folded or turned down before storing in the lower case" as recited in claim 4.

Hirayama discloses a lower case 2 with a keyboard on the front surface and a battery on the back surface. Hirayama does not disclose or suggest a flexible board. Hirayama also does not disclose or suggest that a battery terminal, a microphone, a key diaphragm, and a LED for keys are all mounted on a same surface of a flexible board. Ikenouchi does not overcome the deficiencies of the Hirayama patent. Ikenouchi discloses a wireless telephone that has light-emitting diodes. Ikenouchi does not disclose or suggest a flexible board. Ikenouchi does not disclose or suggest that a battery terminal, a microphone, a key diaphragm, and a LED for keys are all mounted on a same surface of a flexible board. Therefore, even if combined, the references do not disclose all the elements of the claimed invention.

Claim 10 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Hirayama, in view of Azartash, and further in view of Roloff (DE 019723338 A1). For following reasons, the examiner's rejection is respectfully traversed.

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None of the references disclose or suggest that "a portion of the upper case and the lower case in the vicinity of a section being mechanically connected with respect to each other is formed in a narrower configuration than a remaining portion. Roloff is cited for discloses these elements.

Roloff discloses a telephone with a single case that has an inflatable element with a chamber supporting a keyboard and a microphone and a loudspeaker. Roloff does not have an upper case and a lower case. Roloff does not have a mechanically connected section. Therefore, Roloff does not disclose a narrower configuration in the vicinity of a mechanically connected section between an upper case and a lower case. Therefore, even if combined, the references do not disclose all the elements of the claimed invention.

Furthermore, there is no suggestion or motivation for one skilled in the art at the time the invention was made to combine Hirayama and Azartash with Roloff to arrive at the claimed invention. Roloff discloses a single case that has an inflatable element with a chamber supporting a keyboard and a microphone and a loudspeaker. There is no motivation or need in Hirayama and Azartash to have an inflatable support for the keyboard, microphone or loudspeaker. Thus, there is no motivation to look at or use the elements in Roloff. Reconsideration and withdrawal of the rejection based upon the combination of references is respectfully requested.

Claim 11 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Hirayama, in view of Weissappel et al. (U.S. Patent No. 5,857,148), and further in view of Tamura (JP 06224816 A). For following reasons, the examiner's rejection is respectfully traversed.

None of the references disclose or suggest "a control processing section" included in an upper case as recited in claim 1. Hirayama discloses an antenna 11 and an LCD 13 provided on an upper case 3 of a portable phone. However, Hirayama is silent as to where the control processing section is located. Weissappel and Tamura are also silent as to where the control processing section is located. Therefore, even if combined, the references do not disclose all the elements of the claimed invention.

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Furthermore, there is no suggestion or motivation for one skilled in the art at the time the invention was made to combine Hirayama, Weissshappel and Tamura to arrive at the claimed invention. Hirayama discloses a keypad and a battery on a lower case 2, and an LCD 13 and antenna on an upper case 1. Weissshappel discloses a lower case with an antenna, a battery, and a keypad below an LCD 12, and an upper case that is a thin flip cover with a second battery. Tamura discloses an upper case with an antenna, a battery, and a keypad below an LCD 12, and a lower case that is a thin flip cover with a microphone and a vibrator. Since both Weissshappel and Tamura have thin flip covers with almost no phone components, there is no motivation to look at or use Weissshappel and Tamura modify the location of phone components in Hirayama. Reconsideration and withdrawal of the rejection based upon the combination of references is respectfully requested.

Claim 12 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Hirayama, in view of Weissshappel and Tamura, and further in view of Hitachi and Takagi. For following reasons, the examiner's rejection is respectfully traversed.

None of the references disclose or suggest that "the flexible board shares its use as a connecting board for connecting the upper case and the lower case" as recited in claim 12. Hitachi is cited as disclosing these elements.

Hitachi discloses an FPC board electrically connecting housings 1 and 2 (Abstract). It appears from Figs. 6 and 8, that the FPC board is a connection between two hard printed boards that are located in housings 1 and 2, respectively. Therefore, the Hitachi FPC board is not a flexible board used as a keyboard that shares its use as a connecting board, as the Hitachi FPC board is only functioning as a connection between the two hard print boards.

Furthermore, there is no suggestion or motivation for one skilled in the art at the time the invention was made to combine Hirayama and Weissshappel and Tamura with Takagi and Hitachi to arrive at the claimed invention. Takagi discloses a single case with a flexible printed board 8 used as a

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keyboard. Hitachi discloses a FPC board that is a connection between two hard printed boards. Therefore, the combination of the Takagi flexible printed board with the Hitachi FPC board would result in the Hitachi FPC board being a connection between a flexible printed board and a hard printed board. The desirability of such a modification to extend the flexible print board to share its use as a connecting board is found only in the Applicants' own description of the invention, in contrast to the requirement that the teaching or suggestion to make the modification must be found in the prior art, and not based on an applicant's disclosure. Reconsideration and withdrawal of the rejection based upon the combination of references is respectfully requested.

Claim 13 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Hirayama, in view of Weissshappel and Tamura, and further in view of Ikenouchi and Mendolina (U.S. Patent No. 5,751,804). For following reasons, the examiner's rejection is respectfully traversed.

None of the references disclose or suggest that "a battery terminal, the vibrator, a microphone, a buzzer, a key diaphragm, and a LED for keys are all mounted on a same surface of the flexible board and folded or turned down before storing in the lower case" as recited in claim 13.

Hirayama, Weissshappel, and Tamura do not disclose or suggest a flexible board. Hirayama, Weissshappel, and Tamura also do not disclose or suggest that a battery terminal, the vibrator, a microphone, a buzzer, a key diaphragm, and a LED for keys are all mounted on a same surface of a flexible board. Ikenouchi does not overcome the deficiencies of Hirayama, Weissshappel, and Tamura. Ikenouchi only discloses a wireless telephone that has light-emitting diodes. Mendolina does not overcome the deficiencies of the previous references. Mendolina discloses a phone with a buzzer, but it does not disclose the location of the buzzer. Therefore, even if combined, the references do not disclose all the elements of the claimed invention.

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Claim 14 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Hirayama, in view of Weissshappel and Tamura, and further in view of Roloff. For following reasons, the examiner's rejection is respectfully traversed.

None of the references disclose or suggest that "a portion of the upper case and the lower case in the vicinity of a section being mechanically connected with respect to each other is formed in a narrower configuration than a remaining portion. Roloff is cited for discloses these elements.

Roloff discloses a telephone with a single case that has an inflatable element with a chamber supporting a keyboard and a microphone and a loudspeaker. Roloff does not have an upper case and lower case. Roloff does not have a mechanically connected section. Therefore, Roloff does not disclose a narrower configuration in the vicinity of a mechanically connected section between an upper case and a lower case. Therefore, even if combined, the references do not disclose all the elements of the claimed invention.

Furthermore, there is no suggestion or motivation for one skilled in the art at the time the invention was made to combine Hirayama, Weissshappel, and Tamura with Roloff to arrive at the claimed invention. Roloff discloses a single case that has an inflatable element with a chamber supporting a keyboard and a microphone and a loudspeaker. There is no motivation or need in Hirayama, Weissshappel, and Tamura to have an inflatable support for the keyboard, microphone or loudspeaker. Thus, there is no motivation to look at or use the elements in Roloff. Reconsideration and withdrawal of the rejection based upon the combination of references is respectfully requested.

In light of the foregoing, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.



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A check in the amount of \$196.00 is included to cover the one month extension of time fee of \$110 and the fee of \$86.00 for the additional new claim which was added.

If there are any additional fees resulting from this communication, please charge the same to our Deposit Account No. 16-0820, our Order No. 33388.

Respectfully submitted,

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